

Pulse Oximeter Team

Progress Report #1

Team Members

Bogdan Dzyubak – Communicator
Joe Helfenberger—BWIG
Jonathan Meyer—Leader
Matthew Parlato—BSAC

Clients

Amit Numunkar
Jonathan Baran

Advisor

Dr. John Webster PhD.

Date

1/23/09 – 1/29/09

Problem Statement

The purpose of this project is to develop a low-cost pulse oximeter for use in developing countries. It will be integrated with an innovative medical technology platform which uses a laptop to record and display patient data. The oximeter must be rugged, durable, inexpensive, and must deliver data to a laptop as an analog signal via a USB interface.

Restatement of Team Goals

- Select a project.
- Delegate team roles.
- Meet with the client.
- Develop preliminary PDS.

Individual Goals

- Research how pulse oximeters are built.
- Review pulse oximeters already on the market, and identify relevant patents.
- Complete relevant BME 310 and BME 462 labs to become familiar with pulse oximetry.
- Identify necessary specifications for pulse oximetry (accuracy, precision, cost, etc.).

Accomplishments

- Met with Amit and Jonathan, identified the purpose and primary constraints of the project.
 - Developed preliminary PDS.
 - Started researching how pulse oximeters are built
-

Project Schedule

The table below is a Gantt chart of the projected timeline.

Tasks	January		February				March				April				May	
	23	30	6	13	20	27	6	13	20	27	3	13	17	24	1	8
Project Development																
Research																
Brainstorm																
Design																
Prototype																
Deliverables																
Progress reports																
Midsemester presentation																
Midsemester report																
Final presentation																
Final report																
Communication																
Advisor Meetings																
Client Meetings																
Website																

Difficulties

No significant difficulties have been encountered thus far.

Activities

Date	Time	Team member(s)	Activities
1.23.09	1 h	Team	Assigned team roles, developed preliminary PDS.
1.24.09	1 h	Matt	Background research on pulse oximeters
1.24.09	1 h	Joe	Researched pulse oximeters
1.25.09	1.5 h	Matt	Background research on pulse oximeters
	1 h	Bogdan	Research
	.5 h	Bogdan	Set up the meeting with Amit and Jonathan
1.26.09	1 h	Team	Met with Amit and Jonathan, identified the purpose and primary constraints of the project, and gained keycard

			access to designated project lab space.
1.28.09	1h	Jonathan	Worked on progress report
1.28.09	0.75 h	Team	Delegated focus areas, discussed how pulse oximeters work
1.28.09	0.75 h	Bogdan, Matt Jonathan	Worked on PDS
1.29.09	.5 h	Joe	Researched how pulse oximeters work
1.29.09	.75 h	Jonathan	Researched relevant patents

Expenses

No expenses have been encountered thus far.